INITIAL STUDY / PROPOSED NEGATIVE DECLARATION

PROJECT TITLE:

MODIFICATION OF SECTION 503, TITLE 14, CALIFORNIA CODE OF REGULATIONS, PERTAINING TO FEDERAL ORDERS AND MIGRATORY BIRDS – NUISANCE CANADA GEESE

April 1, 2008

STATE OF CALIFORNIA
THE RESOURCES AGENCY
FISH AND GAME COMMISSION

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EXECUTIVE SUMMARY

This proposed project is a regulation change to amend Section 503 of Title 14, California Code of Regulations, to address social, economic and human health and safety concerns caused by resident Canada geese. Section 503 permits the implementation of orders and permits by the Federal government to address agricultural damage by migratory birds, but no where else in State regulation does authority exist to provide for Federally-permitted management actions to address nuisance or human health and safety problems associated with resident Canada geese.

According to the U.S. Fish and Wildlife Service (USFWS) (Federal Register Vol 71 No. 154 pages 45964- 45993) "[i]n recent years, the numbers of Canada geese that nest and/or reside predominantly within the conterminous United States (hereafter resident Canada geese) have undergone dramatic growth to levels that are increasingly coming into conflict with people and human activities and causing personal and public property damage, as well as public health concerns, in many parts of the country."

In a Final Rule and Record of Decision issued August 10, 2006 (Federal Register Vol 71 No. 154) the USFWS issued a Depredation Order for resident Canada geese. This Order authorizes, under Federal law and regulation, specific actions to address issues associated with resident Canada geese, primarily through nest and egg destruction, but including other measures under specific conditions to reduce the number of adult geese. However, existing State law prohibits, unless otherwise permitted, the needless destruction of bird nests and eggs, and there are no specific provisions in State regulation that allow the other Federally-sanctioned methods.

In California, Canada geese have greatly expanded their nesting range over the last 50 years (Moffit 1931, Zeiner et al. 1990, Dept Fish and Game 2008), and have become common in many urban areas. Complaints about excessive goose droppings, damage to landscaping, and potential effects on water quality, have risen in many areas of the State.

Canada geese are federally protected by the Migratory Bird Treaty Act (Act). Regulations governing the issuance of permits to take, capture, kill, possess, and transport migratory birds are authorized by the Act, promulgated in Title 50 Code of Federal Regulations (CFR) parts 13 and 21, and issued by the U.S. Fish and Wildlife Service (USFWS). The proposed regulation adopts, with slight modifications, the Federal Orders.

PROPOSED NEGATIVE DECLARATION

Pursuant to Title 14, California Code of Regulations, Sections 15070 and 15071, and in accordance with the Commission's certified regulatory program (CRP) approved by the Secretary for the California Resources Agency pursuant to Public Resources Code section 21080.5 (See generally Cal. Code Regs., Tit. 14, §§ 781.5, and 15251, subd. (b).), the California Fish and Game Commission (Commission) does prepare, make, declare, and publish this Negative Declaration for amending Section 503.

Brief description of the project: Amend existing regulations in Title 14, Section 503 to permit modified implementation of the Federal Orders pertaining to resident Canada geese in California to address issues associated with these geese. The Federal Orders allow certain activities to reduce the effects of resident Canada geese on humans, but no where in existing State regulation does authority exist to provide for those Orders.

Fish and Game Code sections 2000 and 3503 prohibit the taking of birds or their parts, including nests and eggs, absent provisions elsewhere in the Fish and Game Code or regulations made pursuant thereto. This proposed change would permit the take of resident Canada geese and their nests and eggs to alleviate nuisance and human health and safety problems consistent with federal regulations with two proposed restrictions.

Section 355 of the Fish and Game Code authorizes the Commission to adopt regulations pertaining to migratory birds to conform with or further restrict the rules and regulations prescribed pursuant to the Migratory Bird Treaty Act (Act) (16 U.S.C. 703-711).

The proposed project would provide authority in state regulation for nest and egg destruction and other management actions for human health and safety reasons.

Location of project: Statewide.

Proposed finding: The Fish and Game Commission (Commission) finds that there is no substantial evidence, in light of the record, that the project may have a significant effect on the environment. Specifically, the implementation of management actions to address nuisance and human health and safety concerns associated with resident Canada geese will not cause that population to drop below self-sustaining levels. The following initial statement analysis provides the basis to support adoption of the proposed finding and Negative Declaration.

INITIAL STUDY

Project description

The proposed project consists of modifying Title 14, Section 503 to permit implementation of Federal Orders to address nuisance and human health and safety concerns associated with resident Canada geese.

In a Final Rule and Record of Decision issued August 10, 2006 (Federal Register Vol 71 No. 154) the USFWS issued a Depredation Order for resident Canada geese. This decision contained several parts, but only 3 portions affect the management of nuisance Canada geese in California. The Final Rule is provided as Appendix 1. The parts of the Federal Order that apply to the Pacific Flyway, including California are:

1) the Airport Control Order that provides *airport managers* the authority to control resident geese through: 1) trapping and relocation; 2) nest and egg destruction; 3) trapping and culling; or 4) other methods. Nests and eggs may be destroyed between March 1 and June 30 and other control methods may be used between April 1 and September 15;
2) the Nest and Egg Control Order that provides *private landowners and managers of public lands* the authority to take nests and destroy eggs when necessary to resolve injury to people, property, and/or agricultural crops. Nests and eggs may be destroyed between March 1 and June 30; and,
3) the Public Health Control Order that authorizes *state wildlife agencies or their agents* to conduct direct control activities whenever a direct threat to human health is acknowledged by any Federal, State or local public health agency. Nests and eggs may be destroyed between March 1 and June 30; other control activities as identified in the Airport Control Order could occur between April 1 and August 31.

As permitted by the USFWS, these management actions, if consistent with State law, could occur anywhere in the State. The Department of Fish and Game (Department) proposes that the Commission adopt the Federal regulations with slight modifications to: 1) control the use of translocations from airports or to address human health concerns through permits issued by the Department; and, 2) to control nest and egg destruction in certain parts of the State through permits issued by the Department. The specific regulatory language proposal is included in Appendix 2.

The Department is recommending that the use of translocations be limited to permits issued by the Department. Unregulated translocations would likely exacerbate the problems associated with resident Canada geese if birds were moved to unsuitable locations. Because the Public Health Control Order, if adopted in State regulation in its entirety as proposed, permits only state wildlife agencies or their agents to conduct management actions, including translocations, to address public health issues, the

Department would under Federal provisions have the authority to permit specific management actions.

The proposed regulation would permit, without State oversight, the take of nests and eggs in counties with large urban centers that are not part of the historic distribution of nesting Canada geese in California. These counties are: Sonoma, Napa, Solano, Marin, Contra Costa, Alameda, San Francisco, San Mateo, Santa Clara, Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange and San Diego counties. The Department proposes to control the take of nests and eggs from less urbanized areas, including the native range of the species, to reduce the effect of nuisance Canada goose control on natural populations and hunting opportunity.

Department Review of Permit Applications

Several factors will be examined by the Department when it considers requests for nest and egg destruction in the majority of California counties. The objective of Department review of nest and egg destruction requests is to conserve Canada geese within their historic and traditional nesting range and to provide for adequate populations to provide for recreational uses, both mandates of the State wildlife conservation policy (Fish and Game Code section 1801)

The following factors will be considered by the Department:

- Location (historic nesting area or other) and type of property
- Description and magnitude of damage
- Number of nests proposed for destruction
- Non-lethal management actions taken to control or eliminate the problem (including frequency and duration)
- How long the damage has been occurring
- Human health and safety hazards involved
- Extent of the damage
- Magnitude of reduction to hunting opportunity if permit issued

Environmental setting

Description of Canada geese and their taxonomy

Canada geese (*Branta canadensis*) are the most familiar geese across North America. They are now classified into 2 species and most authorities recognize 11 subspecies varying in size and shading (Bellrose 1980). All have a black head and neck with a white cheek patch; some may have a full or partial white ring at the base of the neck, brownish wings, back and sides, white to grayish-brown breast and belly, white rump patch, and black bill, legs and feet. Common characteristics of all geese include similar coloration of males and females, life-long pair bonds (although those that lose mates will re-pair), first breeding at 2-3 years of age, well-adapted for walking on land, feed primarily by grazing on vegetation, and they are very social except during nesting. Pairs

generally establish a nesting territory, produce normally 4 to 6 eggs per nest, and raise their young as a family unit. Later, families often combine to form “creches” or “gang broods” guarded by several parents. As with most other waterfowl, geese are flightless for about a month in mid-summer, while new wing feathers are grown. Predators of Canada geese and their eggs vary widely among areas and include foxes, coyotes, wolves, bears, skunks, gulls, eagles, and ravens. Canada geese are popular with and accessible to many wildlife watchers, especially in some urban areas. They are prized by hunters across the continent.

In the Pacific Flyway, breeding Canada geese belong to the Western or Great Basin Canada goose subspecies *(B. c. moffitti).* Two populations of Western Canada geese are recognized in the Pacific Flyway for management purposes: the Pacific Population and the Rocky Mountain Population (Krohn and Bizeau 1980, Subcommittee on Pacific Population of Canada Geese 2000). A large portion of the Pacific Population is relatively non-migratory, with many segments wintering on or in relatively close proximity to breeding areas, although more northern segments make annual migrations. Pacific Population Western Canada geese breed traditionally in central and southern British Columbia, northwestern Alberta, northern and southwestern Idaho, western Montana, northwestern Nevada, northern California, and throughout Washington and Oregon (Krohn 1977). That range has expanded in almost all states (Subcommittee on Pacific Population of Canada Geese 2000).

Nesting behavior and timing

Resident Canada geese begin separating themselves from flocks for nesting in late winter and actual nesting activities begin as early as February in some parts of California and may extend through early June. The nest is usually constructed in a bowl shape from grasses and feathers from the female’s breast, and islands or other areas with some protection from ground predators are often sought (Bellrose 1980). Canada goose nest site selection can be variable and highly adaptive. Some ideal nesting sites for Canada geese include: islands on bodies of water; muskrat houses; artificial nesting structures; along distances of shoreline (usually with some form of vegetation or structure immediately adjacent to the nest); at the base of mature trees; under shrubs; in thick aquatic vegetation such as cattails; in flower boxes and landscaping structure in urban and suburban areas; and in doorways or near structures in urban areas.

The female lays an egg approximately every 1.5 days. Once the eggs are laid, incubation begins and normally lasts 28 days. Once nesting has begun, the male and female will both defend the nest. All of the eggs are hatched at the same time so that the adults can lead the goslings away from the nest. If the nest is destroyed, the pair will generally begin re-nesting at or very near the original nesting site. Canada geese have a greater tendency to re-nest if the original nest is destroyed earlier in the nesting cycle.

Food habits

Canada geese are primarily grazers, relying chiefly on vegetation (Bellrose 1980). They consume many types of grains, grasses, seeds, sedges and other aquatic vegetation,

as well as legumes and succulent plants. Canada geese can often be seen in harvested grain fields, feeding on waste corn, wheat, rice or in growing wheat or rye fields that were planted in the fall or winter. Often domesticated grasses (pastures, lawns, greenbelts, golf courses) are preferred by Canada geese, thereby creating depredation and nuisance problems. Canada geese choose to feed in areas that are relatively open so that they can see potential predators and other dangers.

Molting

Although all birds molt (replace) their feathers, waterfowl go through a second molt each year to replace all flight feathers at the same time, and thus become flightless for a period of about a month. In California, the wing molt takes place as early as late May extending through early July, with a peak in June. Non-breeding yearlings, adults that don't nest, and adults whose nests have been destroyed are usually the first to molt. Adults with young will molt at the brood rearing area shortly after the non-breeding geese initiate their molt. Some individuals will migrate as far north as Alberta and Saskatchewan, Canada to molt (Rienecker 1987).

Canada geese select open areas to molt, usually with water and a food source within walking/swimming distance. This allows the geese to walk or swim everywhere that they need to during their flightless period and the open water is used to escape predators. Lakes, reservoirs, farm ponds or other human-made water bodies often serve as excellent locations for Canada geese during this phase of their lives.

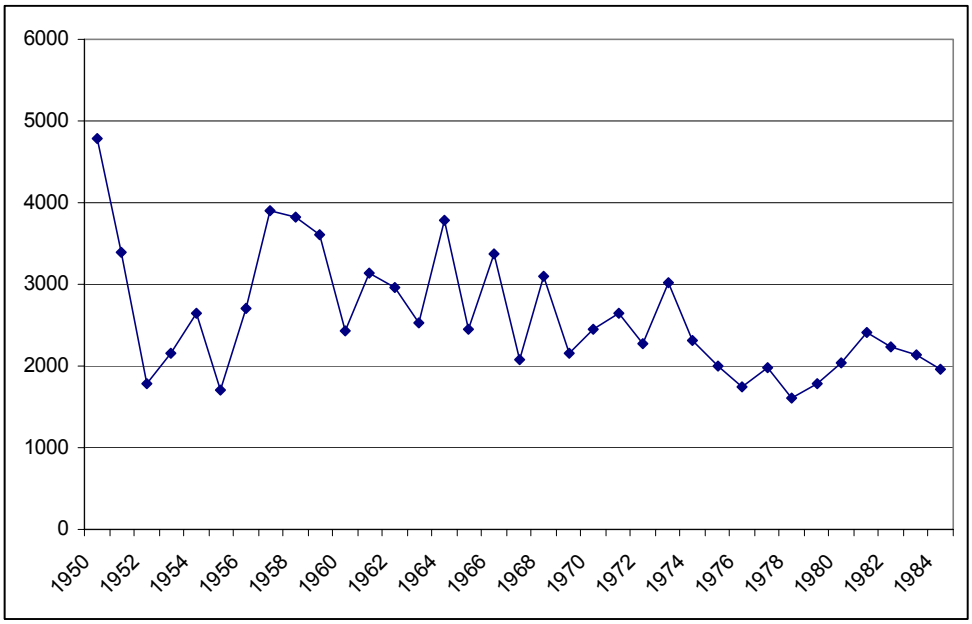
Status of Canada geese in California

Because the Proposed Project is intended to address resident Canada geese, the following discussion is restricted to information on geese nesting in California. Other, more numerous subspecies of Canada geese occur in California in winter, but would not be affected by the Proposed Project, which is limited in timing by the Federal Orders.

Early ornithological records indicate nesting Canada geese occurred primarily in Siskiyou, Modoc and Lassen counties with small numbers in adjacent counties (Moffitt 1931, 1939). Moffitt (1939) concluded that "based upon conservative estimates that no fewer than 1,200 pairs of Canada geese breed in California annually".

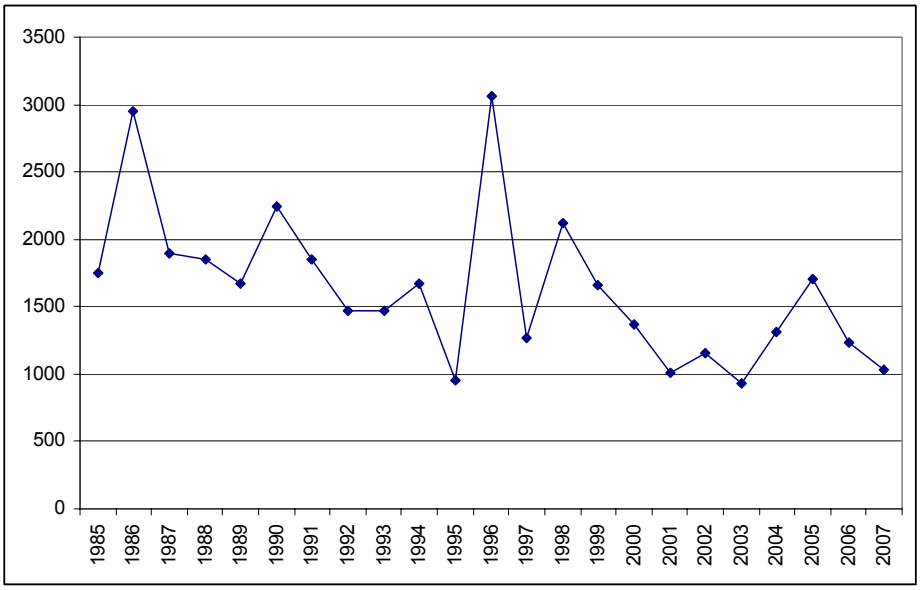
Beginning in 1949, the Department initiated systematic surveys of nesting Canada geese in the traditional breeding range as defined by Moffitt (1939). This survey has been conducted annually in early June. The survey tallies the number of adult Canada geese, the number of adult Canada geese with young (= "breeding pairs"), and the number of young. Thus, the number of breeding pairs is actually successful breeding pairs only, since those geese whose nests failed would be indiscernible from non-breeding geese (comprised mostly of geese too young to breed).

Figure 1. Trend in breeding Canada geese in northeastern California, 1950-1984.



The Department modified its Canada goose survey in 1985, reducing it in scope by surveying fewer areas in the traditional nesting region (Figure 2). It is this survey that is used in the management context of setting hunting regulations under the Flyway Management Plan (Subcommittee on Pacific Population of Canada Geese 2000).

Figure 2. Trend in breeding Canada geese in northeastern California, 1985-2007.



Beginning in 1992, the Department revised its breeding duck survey, which was conducted throughout the major waterfowl breeding areas of the state. This survey follows standard protocols developed by the Service, and estimates the number individuals in the breeding population (e.g. birds present at the time of the nesting season). The survey does not distinguish between non- and successful-breeding geese however the survey encompasses a much larger portion of the State (Figure 3) and samples some of the expanded range of Canada geese. This survey provides a more complete estimate of the number of Canada geese in California (Figure 4).

Figure 3. Waterfowl breeding survey transects in California, 1992-2007

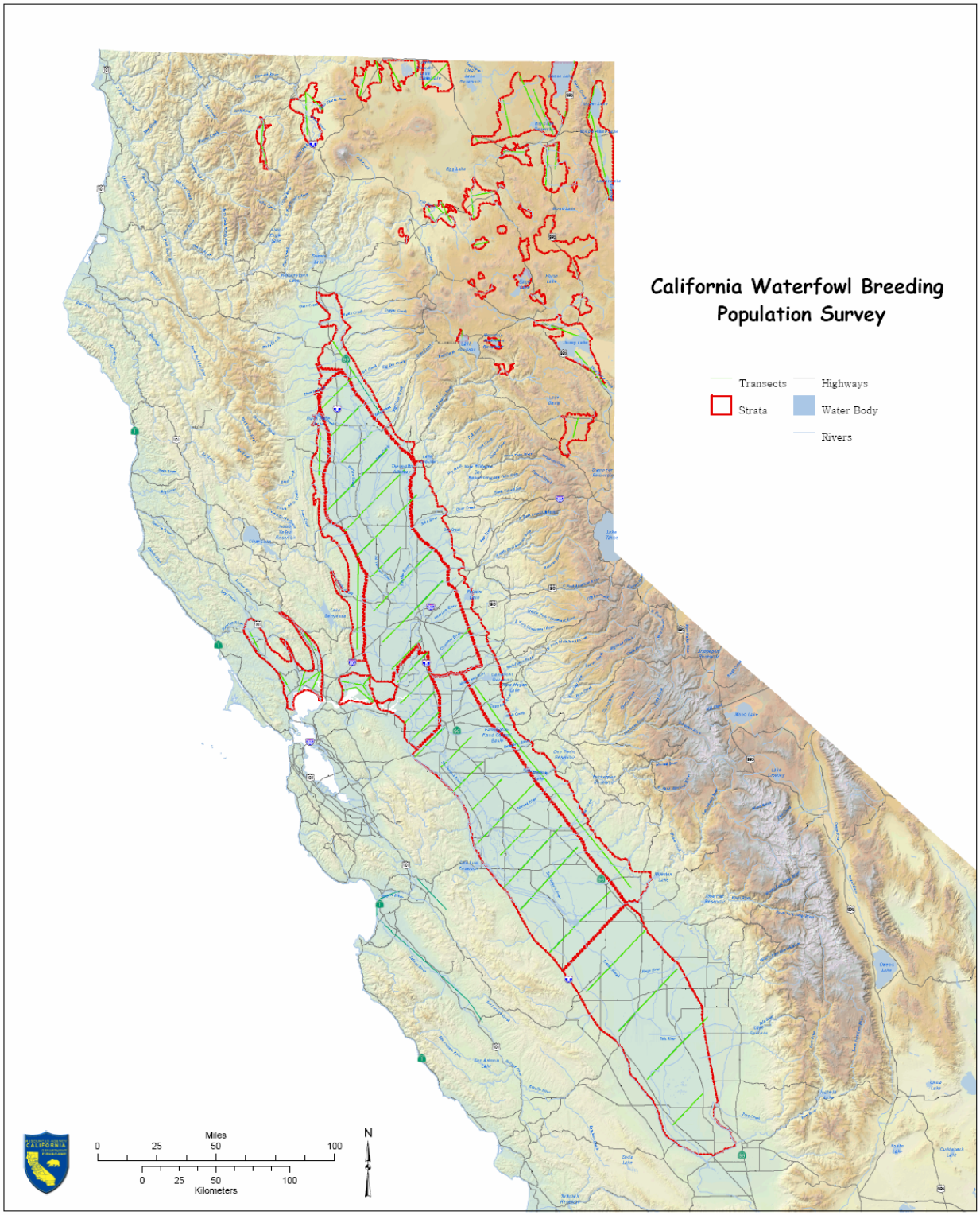
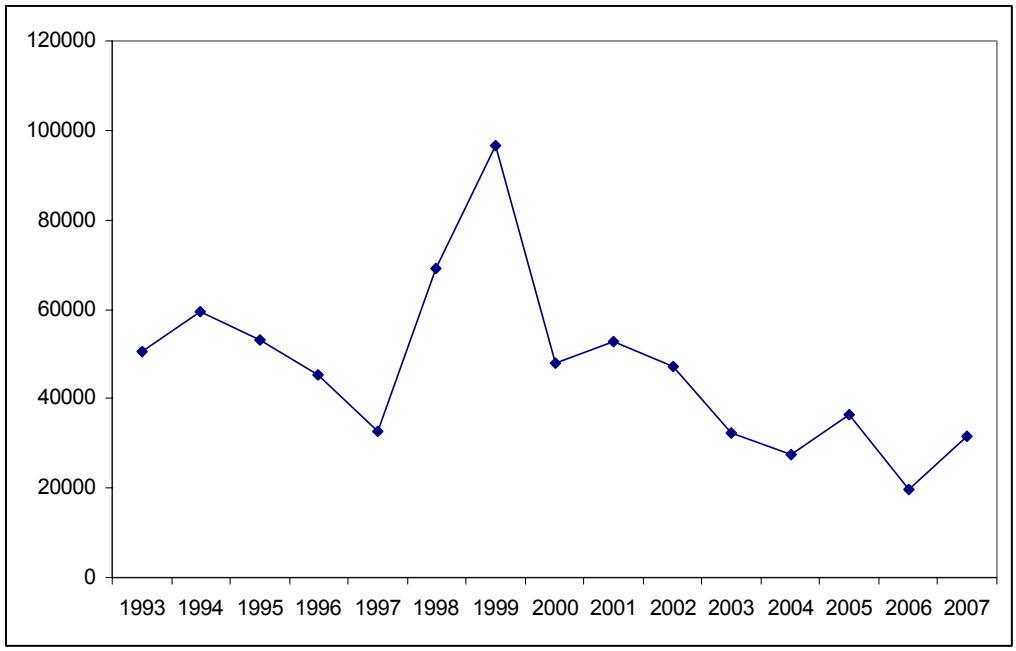
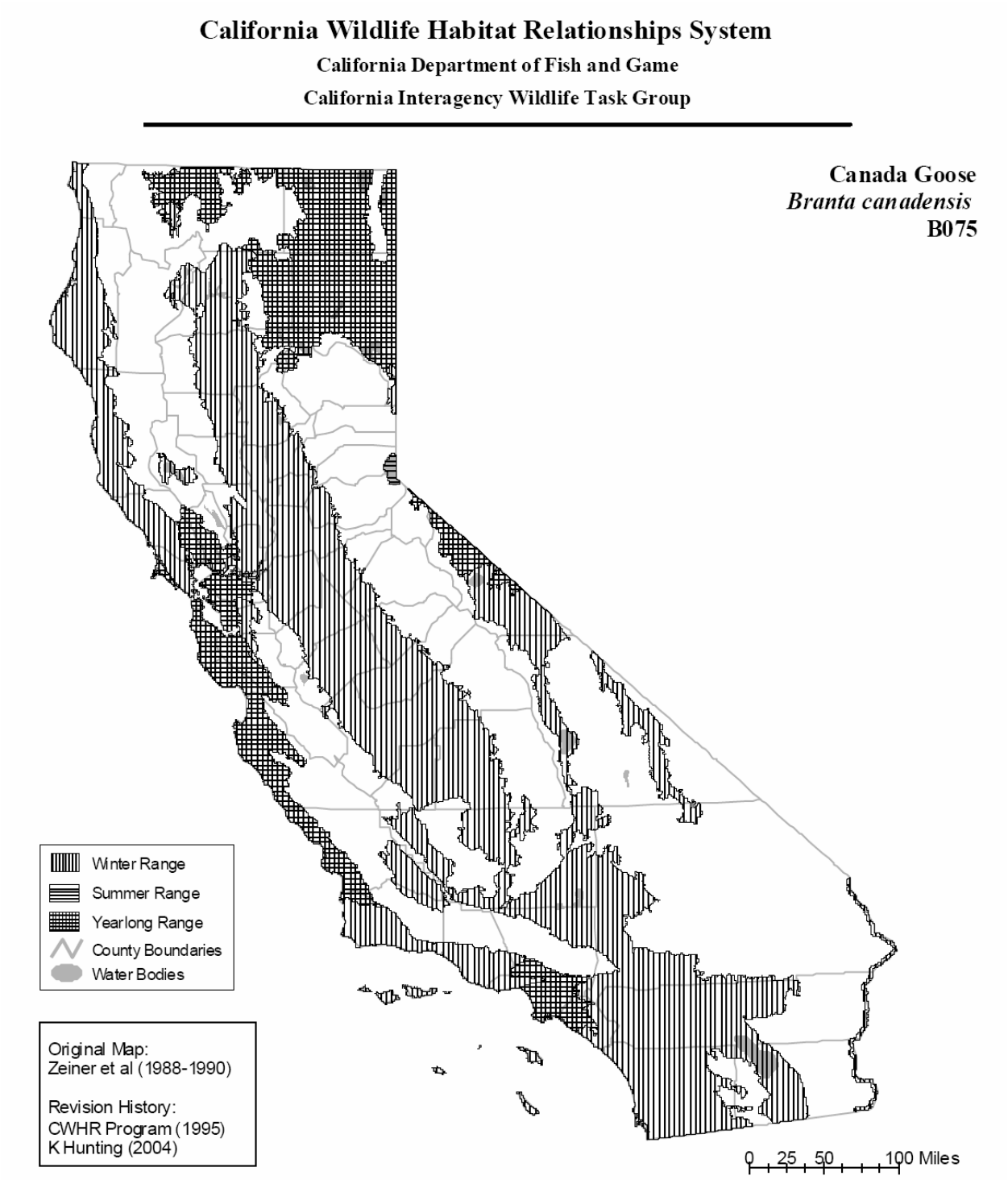


Figure 4. Trend in the breeding population of Canada geese in California, 1992 – 2007.



Even as recently as 1990 (Zeiner et al. 1990), the range of nesting Canada geese was reported to be similar to that reported by Moffit (1939). However by 2008, the documented nesting range had expanded greatly, to include many urban areas of the State (Figure 5).

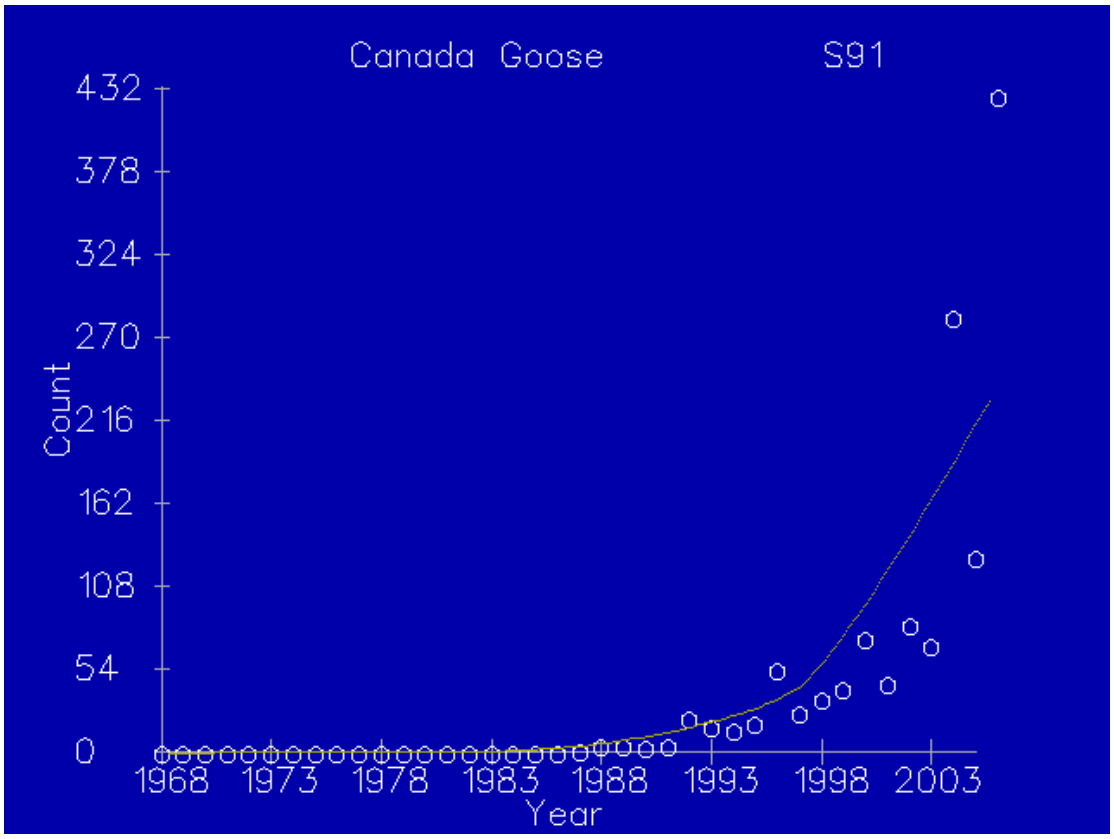
Figure 5. California Wildlife Habitat Relationships System range map of Canada geese in California.



However, all three of these surveys are aerial surveys, and do not sample urban areas due to flight restrictions. Another source of information about the status and trend of Canada geese in California is the Breeding Bird Survey (BBS), coordinated by the U.S. Geological Survey and Canadian Wildlife Service and conducted by volunteers in many areas of North America. It is a roadside survey and each survey route is 24.5 miles long with stops at 0.5-mile intervals. At each stop, a 3-minute point count is conducted. During the count, every bird seen within a 0.25-mile radius or heard is recorded. Surveys start one-half hour before local sunrise and take about 5 hours to complete. Over 4100 survey routes are located across the continental U.S. and Canada. Results are available via the Internet http://www.pwrc.usgs.gov/BBS/about/ (Sauer et al. 2007).

The BBS provides a complimentary source of information about the trend in Canada geese in California, and because it is a land-based survey, it includes areas that can not be sampled by air. The BBS reports trends by Bird Conservation Regions (BCR), including BCR 32 - Coastal California. This BCR encompasses much of central California, including the coastal regions, from about Mendocino county, southward through the Central Valley and extending into the Sierra Nevada mountain range. The trend in Canada geese from this survey indicates a steep increase in the number of breeding Canada geese beginning in the mid 1990s (Figure 6).

Figure 6. Breeding Bird Survey trend for Region 32 – Coastal California, 1968 – 2006.



Detrimental effects of Canada geese

The Final Environmental Impact Statement on Resident Canada Goose Management (USDI 2005) provided a comprehensive review of the biology, status, and management issues associated with Canada geese on a national scale. These are succinctly summarized in the Final Rule (Federal Register Vol 71 No. 154).

"Conflicts between geese and people affect or damage several types of resources, including property, human health and safety, agriculture, and natural resources. Common problem areas include public parks, airports, public beaches and swimming facilities, water-treatment reservoirs, corporate business areas, golf courses, schools, college campuses, private lawns, athletic fields, amusement parks, cemeteries, hospitals, residential subdivisions, and along or between highways.

Property damage usually involves landscaping and walkways, most commonly on golf courses, parks, and waterfront property. In parks and other open areas near water, large goose flocks create local problems with their droppings and feather litter. Surveys have found that, while most landowners like seeing some geese on their property, eventually, increasing numbers of geese and the associated accumulation of goose droppings on lawns, which results in a reduction of both the aesthetic value and recreational use of these areas, cause many landowners to view geese as a nuisance.

Negative impacts on human health and safety occur in several ways. At airports, large numbers of geese can create a very serious threat to aviation. Resident Canada geese have been involved in a large number of aircraft strikes resulting in dangerous landing/ take-off conditions, costly repairs, and loss of human life. As a result, many airports have active goose control programs. Excessive goose droppings are a disease concern for many people. Public beaches in several States have been closed by local health departments due to excessive fecal coliform levels that in some cases have been traced back to geese and other waterfowl. Additionally, during nesting and brood rearing, aggressive geese have bitten and chased people and injuries have occurred due to people falling or being struck by wings."

In California, the Department has received complaints regarding depredations by resident Canada geese in Humboldt and Del Norte counties, and numerous complaints elsewhere in the State from wintering geese not the subject of this Proposed Project. Complaints from urban settings, including golf courses, parks, business parks, residential green-belts, and water storage reservoirs have been received from 16 of California's 58 counties (Figure 7). The complaints have originated primarily from the urban counties of the San Francisco Bay Area (Department files) but extend to the foothill counties on the east side of the Sacramento Valley to Lake Tahoe. These complaints have included excessive goose droppings and feather litter, turf damage, concerns about water quality, and safety concerns from aggressive geese during the breeding season.

Figure 7. Counties in California that have reported problems associated with resident Canada geese to the Department of Fish and Game.

Efforts outside of California to control resident Canada geese

The effects of resident Canada geese have occurred in other portions of the United States prior to the growth and expansion of the population in California. Many studies have been done on the various techniques and these studies are summarized in the Federal EIS (USDI 2005). These include relocation, habitat modification, chemical deterrents, reproductive inhibitors, terrestrial and aquatic hazing, and clutch size reduction via egg oiling. The overall lack of success in most areas led to the development of a more comprehensive program as analyzed in the Federal EIS which resulted in the Federal Orders.

The closest area to California where control of resident Canada geese has been conducted and reported is in Reno, Nevada. There, the number of resident Canada geese rose from a few hundred in the 1980s to over 1200 by 1988 (Hall and Groninger 2002). After 11 air strikes between Canada geese and aircraft at the Reno International Airport, from 1986-1989, nearly 8,000 geese were relocated to other areas during 1989 through 2001. This reduced the population to approximately 800 resident geese and air strikes were related to Canada geese were reduced to two. Costs of the relocation program were borne by the Federal government.

State and Federal roles in managing migratory birds

Migratory birds are managed under the provisions of the Migratory Bird Treaty Act of July 3, 1918 (40. Stat. 755:16 U.S.C. 703 et seq.), Federal regulations [50 CFR 20 (K)(L)], as well as California statutes (Fish and Game Code sections 355 and 356) and regulations selected by the Commission.

The regulations governing the hunting take of migratory game birds in California are selected by the Commission and forwarded to the Service each year. The regulations selected by California must be from within frameworks established by the Service through the following generalized three-step process:

1. The Service, with assistance from the state wildlife agencies and others, assesses the status of migratory game bird populations and establishes a set of regulation frameworks;

2. The Commission makes and forwards specific hunting season selections to the Service regarding regulations for California; and

3. The Service and the State adopt the final regulations.

The Federal frameworks specify the outside dates, total number of hunting days, bag limits, shooting hours, and methods of take authorized for migratory game birds. Proposals selected by the Commission cannot be more liberal than the frameworks established by the Service (Fish and Game Code, Section 355).

In the current proposal, the Federal frameworks (or Orders) provide the outside dates and authorized methods for addressing concerns relative to resident Canada geese. The proposed project would adopt those orders with modifications.

Prior to the change in Federal regulations which implement the Federal orders (absent more restrictive State regulations), individual permit to destroy nests and eggs were issued by the Service. Originally these permits were issued without consultation with the State.

State statutory requirements

Over-arching policy for the conservation and management of wildlife resources is provided in the Fish and Game Code, section 1801, which reads:

"1801. It is hereby declared to be the policy of the state to encourage the preservation, conservation, and maintenance of wildlife resources under the jurisdiction and influence of the state. This policy shall include the following objectives:
(a) To maintain sufficient populations of all species of wildlife and the habitat necessary to achieve the objectives stated in subdivisions (b), (c), and (d).
(b) To provide for the beneficial use and enjoyment of wildlife by all citizens of the state.
(c) To perpetuate all species of wildlife for their intrinsic and ecological values, as well as for their direct benefits to all persons.
(d) To provide for aesthetic, educational, and non-appropriative uses of the various wildlife species.
(e) To maintain diversified recreational uses of wildlife, including the sport of hunting, as proper uses of certain designated species of wildlife, subject to regulations consistent with the maintenance of healthy, viable wildlife resources, the public safety, and a quality outdoor experience.
(f) To provide for economic contributions to the citizens of the state, through the recognition that wildlife is a renewable resource of the land by which economic return can accrue to the citizens of the state, individually and collectively, through regulated management. Such management shall be consistent with the maintenance of healthy and thriving wildlife resources and the public ownership status of the wildlife resources.
(g) To alleviate economic losses or public health or safety problems caused by wildlife to the people of the state either individually or collectively. Such resolution shall be in a manner designed to bring the problem within tolerable limits consistent with economic and public health considerations and the objectives stated in subdivisions (a), (b) and (c).
(h) It is not intended that this policy shall provide any power to regulate natural resources or commercial or other activities connected therewith, except as specifically provided by the Legislature."

Accordingly, the Proposed Project seeks to alleviate economic losses and public health and safety issues consistent with maintaining healthy populations to provide for their sport hunting and non-appropriative uses. The Proposed Project more aggressively addresses problems associated with resident Canada geese in the areas of the State where those problems are greatest, while seeking to minimize the effects of alleviating problems in traditional nesting areas or in areas that provide the greatest amount of sport hunting.

Potential Environmental Effects

Effects on resident Canada geese

The purpose of the Federal Orders, as implemented in California through the proposed change in Section 503, Title 14 California Code of Regulations, is to limit the social and environmental consequences of resident Canada geese through the reduction in the size of resident goose populations. Additionally, the Airport Control Order and the Public Health Order are intended specifically to reduce the potential impacts of resident Canada geese on human health and safety.

In California, resident Canada geese have greatly expanded their range over the last 80 years (Figure 5), their number in the central part of the State (Figure 6) and this expansion in range and number has resulted in widespread documentation of issues related to resident Canada geese (Figure 7).

The Department is currently aware of only two locations where claims of human health-related impacts from resident geese are occurring in California. Similarly, the Department is aware of approximately five airports where the control of resident Canada geese would be likely. Control of resident Canada geese under the Airport Control Order or the Public Health Order would not substantially reduce the number of resident Canada geese in California.

When the Service issued individual permits for the destruction of nests and eggs, 14 individuals permits were issued in California. Most of these were in the San Francisco Bay area and in total, the permits authorized the destruction of 1,490 nests. However, only about 745 nests were actually destroyed (T.Tate-Hall, personal communication).

The Proposed Project would reduce the number of resident Canada geese in California, primarily in their expanded range in urban areas of the State. Because resident goose numbers are high (e.g. >30,000, Figure 4) or expanding in urban areas (Figure 6), a reduction in the number of resident Canada geese through the Proposed Project will not substantially reduce the historical habitat of resident Canada geese or cause the resident Canada goose population to drop below self-sustaining levels. This is because the Department will carefully permit the implementation of the Federal Orders.

Alternative measures to reduce the effect of resident Canada geese

There are numerous approaches to addressing goose nuisance and damage problems. Their implementation is dependent on the number of geese, characteristics of the site, time of year, and public perceptions of control techniques. Certain actions do not require special authority: changes to physical characteristics (habitat), hazing, physical deterrents (i.e. fencing). In some cases in some areas, reducing or eliminating human activities such as feeding or the removal of domestic waterfowl can reduce or eliminate the attractiveness of an area to Canada geese.

If indirect approaches to controlling or reducing nuisance or damage by Canada geese are not effective or feasible, direct population control is often applied. Trapping and relocation can be effective, but are expensive and suitable relocation sites must be available. Relocation has increased potential to spread waterfowl diseases, and testing for these diseases adds to the expense of that technique. Reducing population growth by eliminating recruitment through egg oiling is a common technique and is the method which would be permitted under this proposal. Expanded hunting opportunity, through access or special seasons is often used, but is not feasible in most urban settings. Finally, lethal means of population control can be undertaken by a variety of methods, but in many urban areas this technique is unpopular.

As described in the Service EIS (USDI 2005) certain control activities are not regulated, including habitat manipulation and hazing or harassment. Most of these techniques are well-documented (see Smith et al. 1999), yet recent work includes the use of lasers (Sherman 2003) and spotlights (Vercauteren et al. 2003) as harassment techniques.

The Service (in USDI 2005, pages II-6 through II-9) summarized the various methods of managing resident geese as follows:

"Relocation: Relocating Canada geese can have mixed results. Cooper and Keefe (1997) found the rate of return of relocated geese to the capture sites was lowest for immatures and highest for adults. They reported 0–4 percent of relocated juveniles returned to capture sites and 42 - 80 percent of relocated adults returned to capture sites. Fairaizl (1992) found 19 percent of relocated juveniles returned to the capture area. Smith (1996) reported that the relocation of groups of juvenile geese from urban to rural settings can effectively eliminate geese from urban areas, help retain geese at the release site, expose them to the sport harvest, and increase the natural mortality. Smith (1996) also reported that multiple survival models indicated that survival estimates of relocated juveniles were half of those of urban captured and released birds. Ultimately, the relocation of resident Canada geese from urban habitats can assist in the reduction of overabundant populations (Cooper and Keefe 1997), and has been accepted by the general public as a method of reducing goose populations to socially acceptable levels (Fairaizl 1992). In addition, the removal of geese posing or likely to pose a hazard to air safety at airports has been demonstrated to reduce the population of local geese and decrease the number of goose flights through the airport operations airspace, and has resulted in increased air safety at the Minneapolis-St. Paul International Airport (Cooper 1991). Relocation of resident geese has the potential to spread disease into populations of other waterfowl, including migrants. The AAWV (undated) ".discourages the practice of relocating nuisance or excess urban ducks, geese and swans to other parks or wildlife areas as a means of local population control. The Wisconsin Department of Natural Resources contacted wildlife management agencies of 49 States (excluding Hawaii) to determine if they were interested in obtaining resident Canada geese from Wisconsin. Responses indicated that no States were willing to accept geese from Wisconsin (J. Bergquist, personal communication as cited in USDA 2000). The Wisconsin Department of Natural Resources determined that a limited number of juvenile resident Canada geese may be relocated to designated sites within the state.

The relocations would not be a population restoration effort, but rather would be allowed to alleviate nuisance situations and to provide additional hunting opportunities in the release areas.

"Contraception: Contraceptives have not proven to be an effective long-term solution to controlling populations and reducing damage, and there are no contraceptive drugs registered with the FDA for Canada geese. Although Canada geese have been successfully vasectomized to reduce or prevent gosling production, this method can only prevent the production by a mated pair and is ineffective if the female forms a bond with a different male. In addition, the ability to identify breeding pairs for isolation and to capture a male goose for vasectomization becomes increasingly difficult as the number of geese increases (Converse and Kennelly 1994). Canada geese have a long life span once they survive their first year (Cramp and Simmons 1977, Allan et al. 1995); leg-band recovery data indicate that some geese live longer than 20 years. Thus, the sterilization of resident Canada geese would not reduce the damage caused by the current overabundance of the goose population since the population of Canada geese would remain relatively stable. Keefe (1996) estimated sterilization to cost over $100 per goose (see section **II.D.1. Use of Birth Control** for further discussion).

"Egg Destruction: Addling, oiling, freezing, replacement, or puncturing of eggs can be effective in reducing annual recruitment into the local population (Christens et al. 1995, Cummings et al. 1997). While egg removal/destruction can reduce production of goslings, merely destroying an egg does not reduce a population as quickly as removing immature or breeding adults (Cooper and Keefe 1997). As with other species of long-lived geese, which require high adult mortality to reduce populations (Rockwell et. al 1997), it is likely that adult resident Canada geese must be removed to reduce the population to a level deemed acceptable to communities. Approximately five eggs must be removed to have the effect of preventing one adult from joining the breeding population (Rockwell et al. 1997, Schmutz et al. 1997). Keefe (1996) estimated egg destruction to cost $40 for the equivalent of removing one adult goose from the population. In addition, nest destruction is estimated to cost significantly more than other forms of population management (Cooper and Keefe 1997). Egg destruction, while a valuable tool, has fallen short as a single method for reducing local goose populations. Many nests cannot be found by resource managers in typical urban settings due to the difficulties in gaining access to search the hundreds of private properties where nests may occur. In addition, geese which have eggs oiled in successive years may learn to nest away from the water making it more difficult to find nests. Furthermore, any effective egg destruction program must consider possible renesting by geese within a particular year and the need for multiple years of treatment. If the eggs are destroyed improperly or too early in the breeding season, the possibility of renesting increases and implementation of a one-year or intermittent egg destruction program does little to curb population growth rates over the long-term.

"**Capture With Alpha Chlorolose:** Alpha Chlorolose may be used only by Wildlife Services personnel to capture waterfowl. Pursuant to FDA restrictions, waterfowl captured with Alpha Chlorolose for subsequent euthanasia must be killed and buried or incinerated, or be held alive for at least 30 days, at which time the birds may be killed and processed for human consumption.

"**Toxicants:** All pesticides are regulated by the EPA. There are currently no toxicants registered with the EPA for use on Canada geese.

"Hunting and Depredation Permits: Wildlife Services sometimes recommends that resource owners consider legal hunting as an option for reducing goose damage. Although legal hunting is impractical and/or prohibited in many urban/suburban areas, it can be used to reduce some populations of resident Canada geese. Legal hunting also reinforces harassment programs (Kadlec 1968). Zielske et al. (1993) believed legal hunting would not reduce Canada goose populations where there is limited interest in hunting resident Canada geese.

"Shooting: "Shooting" is the practice of selectively removing target birds by shooting with a firearm. Shooting a few individuals from a larger flock can reinforce birds' fear of harassment techniques. Shooting is used to reduce goose problems when other lethal methods are determined to be appropriate. The birds are killed as quickly and humanely as possible.

"Capture with Option to Process for Human Consumption: The most efficient way to reduce the size of an urban flock is to increase mortality among adult geese. Nationwide, hunting is the major cause of goose mortality, but in an urban environment geese may seldom be available to hunters (Conover and Chasko 1985, Smith et al. 1999). For purposes of lethal control, resident geese are usually captured with rocket nets, drive traps, net guns, dip nets, and/or by hand. Rocket netting involves the setting of bait in an area that can be completely contained within the dimensions of a fully-deployed propelled net. Rocket nets are launched too quickly for the geese to escape. Rocket netting may take place anytime during the year. The molt process, which renders Canada geese flightless, occurs during a short period in the summer. Migrant Canada geese are not present in the conterminous U.S. during the summer months, nor do they cause many of the conflicts in urban/suburban locations. Therefore, to target resident Canada geese for human consumption, capture would be restricted to the summer period (Wildlife Services may conduct activities at any time, as appropriate). Resident Canada geese captured during this period may be processed for human consumption and donated to charitable organizations. It is estimated to cost $18-25 per goose for capture and processing for human consumption (Keefe 1996, Cooper and Keefe 1997). In most cases, these costs do not include the costs of holding and conditioning for processing. The advantages of lethal damage management by Wildlife Services are that it would be applied directly to the problem population, its effects are obvious and immediate, and it carries no risk that the geese will return or move and create conflicts elsewhere. The primary disadvantage is that it is sometimes more socially controversial than other techniques. The use of lethal methods to reduce Canada goose damage can be very effective at alleviating damage and is more economical in this regard when compared to non-lethal methods (Cooper and Keefe 1997). Additionally, capture and removal of Canada geese is the most cost-effective lethal method to reduce damage, except for hunting (Cooper and Keefe 1997). Moreover, the use of lethal methods has longer effectiveness than non-lethal methods because it can take months to years before the original local population level of Canada geese returned. Lethal methods would also reduce conflict among resource owners, whereas non-lethal actions only move the Canada geese among resource owners (i.e.,

spread the damage) (Cooper and Keefe 1997, Smith et al. 1999), and possibly leave resource owners with the fewest financial means burdened with the Canada geese and the damage."

In summary, there are many alternative management actions to address the effects of resident Canada geese. Most authorities recommend an integrated approach (Smith et al. 1999, Bucknell 2003, Beckerman and Lein 2003), in which multiple management options are available depending on the specifics of the particular site. The Proposed Project would permit the implementation of the Federal Orders in California to permit nest and egg destruction.

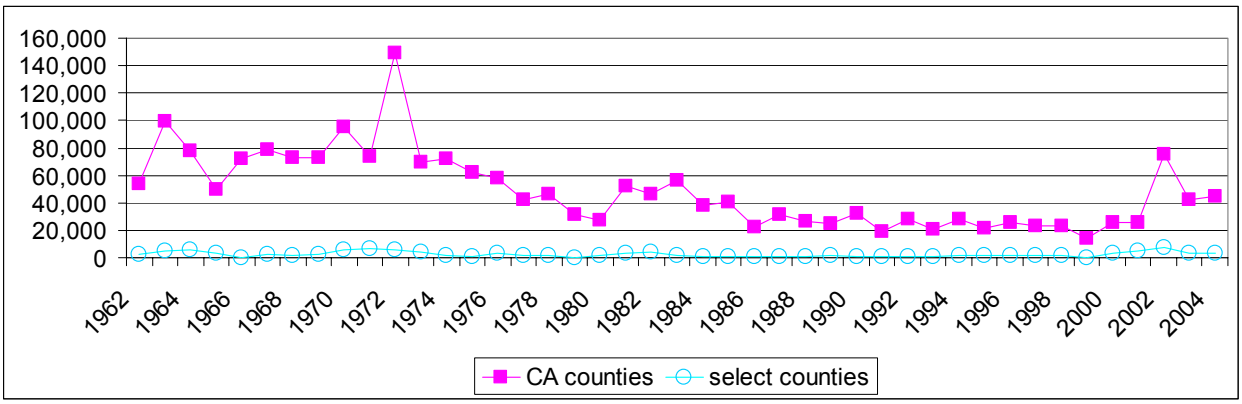
As an update to the analysis presented in the Federal EIS (USDI 2005), a reproductive inhibitor, nicarbazin, received regulatory approval by the Environmental Protection Agency in November 2005. The commercial product (OvoControl™) was registered in California by the Department of Pesticide Regulation in 2007 (http://www.cdpr.ca.gov/docs/registration/ais/newreg/2007.pdf)

Effects on hunting opportunity

Canada geese are valued by waterfowl hunters. According to Service records, (http://www.fws.gov/migratorybirds/reports/HuntingStatistics/Migratory%20bird%20hunting%20activity%20and%20harvest%20during%20the%202005%20and%202006%20hunting%20seasons.%20Preliminary%20Estimates.pdf) there were approximately 48,000 active waterfowl hunters in California in 2006, including about 31,000 goose hunters. These goose hunters spent about 258,000 days afield.

The Service annually estimates the hunting participation and success of migratory bird hunters. This survey has been conducted since 1962. In California, harvest of Canada geese (the survey does not estimate harvest of subspecies) has trended downward (Figure 8), due mostly to the re-distribution of cackling Canada geese. Harvest of Canada geese in the 14 counties wherein the Proposed Project does not recommend Department oversight of nest and egg destruction registrations, is small (Figure 8) but this conclusion is affected by the Service's sampling design.

Figure 8. Harvest of Canada geese in California estimated by the Service

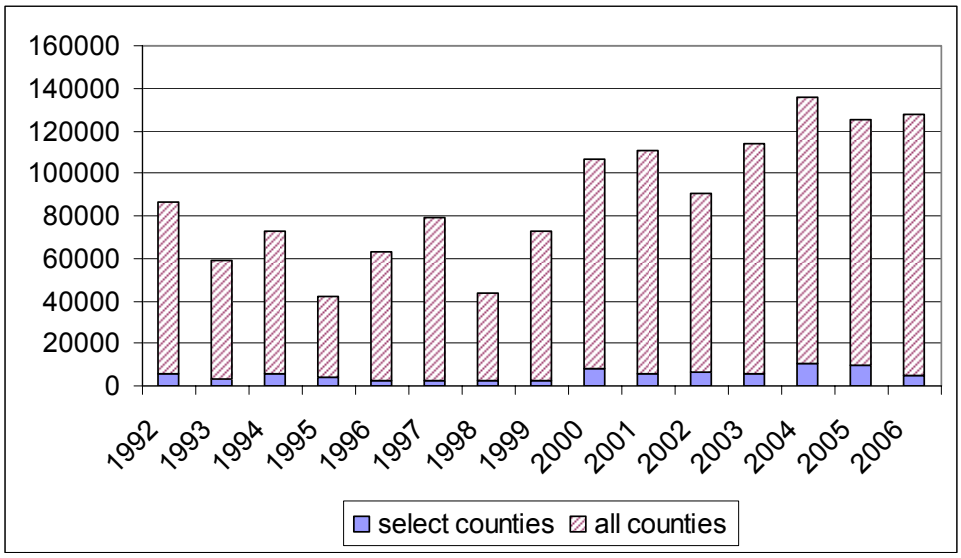


The Federal harvest survey is designed to estimate harvest and hunter participation at the flyway level, and so estimates at levels smaller than the State level (e.g. counties) are not precise. The Department conducts an Annual Game Take Survey (Department files, most currently available estimates are at: http://www.dfg.ca.gov/wildlife/hunting/uplandgame/docs/gths2004.pdf

However, unlike the Federal survey, the State survey does not have a process for estimating the species composition of the waterfowl harvest. For example, the Federal survey provides estimates of the harvest of Canada geese and white-fronted geese, both are combined in the State survey. The State survey provides estimates of "dark" goose harvest only since 1992. Given the distribution of Canada geese and white-fronted geese in California, the bulk of this dark goose harvest in the 14 selected counties is most likely comprised of Canada geese (Department files). Dark goose harvest in the selected counties is small relative to the statewide harvest (Figure 9). An apparent increase in the harvest of dark geese in these urban counties in recent years most likely reflects the observed increase in resident Canada geese (Figure 6).

The implementation of the Proposed Project is likely to reduce hunting opportunity if the Proposed Project is successful in its goal of reducing the resident Canada goose population to levels that are socially acceptable. As a proportion of statewide goose harvest however, the effect will be small.

Figure 9. Harvest of dark geese in California estimated by the Department.



Effects on wildlife viewing opportunity

The goal of the Proposed Project is to implement Federal Orders intended to reduce the nuisance and public health and safety detrimental effects of resident Canada geese through reduction in the number of their numbers. This will result in fewer geese available for viewing. However, there is no evidence that these management actions have led anywhere to the complete elimination of geese (USDI 2005). Thus, the availability of geese for viewing will be reduced but not eliminated.

Potential for significant effects

Previous reviews of other potential environmental effects on the population status of Canada geese were analyzed in previous environmental documents (Dept. Fish and Game 2007) related to the implementation of hunting regulations on waterfowl. Table 1 provides an assessment of other potential affects of the Proposed Project.

Table 1. Environmental Factors Potentially Affected

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
b) Cause a substantial adverse change in				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
the significance of an archaeological resource pursuant to §15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Building Code (1994), creating substantial risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?				X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?				X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
X. MINERAL RESOURCES -- Would				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XI. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X
XIV. RECREATION --				
a) Would the project increase the use of				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

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Appendices

Appendix 1 - Final Rule (Federal Register Vol 71 No. 154)

The Final Rule was published on August 10, 2006. This Rule is approximately 34 pages in length. In the interest of conserving paper, the Final Rule is not included herein but may be accessed thought the Internet at:

http://frwebgate6.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=781952257597+7+0+0&WAISaction=retrieve

Appendix 2 - Proposed Regulatory language for Section 503

§503. Crop Damage and Nuisance Canada geese

In accordance with the provisions of Section 355 of the Fish and Game Code and pursuant to the Migratory Bird Treaty Act, the Fish and Game Commission does hereby approve the following federal orders and permits:
(a) all orders and permits by the federal government authorizing the herding or take of migratory game birds to alleviate crop depredation.
(b) the Airport Control Order (50 CFR 21.49) except trapping and relocation of Canada geese from airports may only occur under the terms and conditions of a permit issued by the Department.
(1) Requests for permits to trap and relocate Canada geese from airports shall be submitted to the department at 1812 Ninth Street, Sacramento, CA 95811 in writing and shall include the following information:
(A) Name and address of applicant
(B) Location (airport) and number of geese to be trapped and relocated
(C) Location of, and proof of permission to use, release site
(c) the Nest and Egg Control Order (50 CFR 21.50) may occur under the terms and conditions of a permit issued by the Department (note: Registration is required by the U.S. Fish and Wildlife Service at: https://epermits.fws.gov/eRCGR/geSI.aspx).
(1) Requests for permits to destroy nests and eggs of Canada geese from the counties not listed in subsection (c)(2) shall be submitted to the Department at 1812 Ninth Street, Sacramento, CA 95811 in writing and shall include the following information:
(A) Name and address of applicant
(B) Location and number of nests and/or eggs to be destroyed
(2) Exception: Nests and eggs of Canada geese may be destroyed without a permit issued by the department only in the following counties: Sonoma, Napa, Solano, Marin, Contra Costa, Alameda, San Francisco, San Mateo, Santa Clara, Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange and San Diego counties.
(d) the Public Health Order (50 CFR 21.52).
Note: Authority and reference cited: Migratory Bird Treaty Act (16USC703 et seq.) and Section 355, Fish and Game Code.